

Summary of PIER Advisory Group Workshop Comments On the 2011/12 Proposed Smart Infrastructure Research Initiatives

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**Michael Gravely
Manager
Energy Systems Research Office**

Summary of June 21st Workshop



California Energy Commission – PIER

Staff Program Presentations

- Policy Drivers
- Goals
- General Approach
- Current Research Initiatives
- Planned Solicitations with FY 10/11 Funds
- Proposed Research Initiatives FY 11/12

Advisory Group Agenda



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- Overview of advisory group meeting
- Break out in to three sessions:
 - Smart Grid
 - Transportation Energy
 - Environmental and Climate Change
- Presentation on results of break out sessions
- Discussions on Smart Infrastructure Group Operation

Advisory Group Recommendations



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■ Smart Grid

- The Advisory Group supported the overall initiatives as presented and recommended no specific modifications
- The group requested additional attention be given to field demonstrations of new and emerging technology and the integration of these technologies (especially micro grids)
- The group emphasized that distribution research is high priority
- The group recommended that the PIER staff work to leverage ongoing DOE ARRA funded work into new future initiatives as much as possible (especially smart grid activities)
- The group indicated that the PIER Renewable and Energy Efficiency Game Changers need to be coordinated with any similar CPUC funded field demonstration efforts with the IOUs

■ Transportation Energy

- Implement research on impacts of human behavior on vehicle technology acceptance
- Facilitate information/data sharing between PIER and private entities working on advanced transportation technologies
- Sustainable communities research is needed and encouraged
- Integrate research outcomes across the three transportation focus areas
- Pursue opportunities for second life/ EV recycling research
- Develop research projects for monitoring and measuring electricity as fuel

■ Environmental and Climate Change

- Encourage more research related to habitat, species, and water since there is a strong nexus with energy sector
- PIER work on sea-level rise is crucial for the State
- Review and coordinate with other State agencies and their long-term planning activities
- Do not stop working on GHG inventory methods
- Encourage a broad and open construct regarding impacts and adaptation. Do not reduce the scope of this area of work.
- PIER is the main source of scientific information on impacts and adaptation in CA. This work should be continued
- Appreciate PIER looking at beneficial uses of CO₂

■ Overall Group Recommendations

- Continue to pursue good technology and system integration demonstrations
- Utilities want to be more actively involved in project planning, selection and implementation
- Coordination is key to maximizing value
- Work to leverage the billions of dollars being spent by ARRA in California and the nation when future planning is done
- Integration between Smart Infrastructure sub groups is critical to solving interdisciplinary challenges
- Find new opportunities to efficiently work across PIER teams (ETSI, Transportation, Environmental, Renewables, IAW, and Buildings) to demonstrate new integrated system level solutions
- Unhappy that CC focus has been reduced and believe adaptation work is important

FY 11/12 Initiatives



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- The staff's proposed FY 11/12 initiatives demonstrate they are responsive to Advisory Group recommendations
 - As funded projects are finalized, the input received from the Advisory Group will help project managers define their integrated project ideas
- ETSI, Transportation and Environmental teams should work to ensure the Renewable and Building Efficiency Game Changers are fully integrated and address the issues identified by the Advisory Group
- The Advisory Group was very supportive of the Venture Capitol Game Changer ESRO is managing and recommended increasing the activity (if possible)